AMENDMENT TO THE CLAIMS

1. (Currently Amended) A method of storing speech information for use in retraining a speech model, the method comprising:

receiving a speech signal;

identifying at least one feature value for each frame of a set of frames of a speech signal;

decoding the speech signal based on the speech model to identify a sequence of alignment units;

aligning a state of an alignment unit from the sequence of alignment units with a frame in the set of frames of the speech signal; ~~and~~

before receiving enough frames of the speech signal to begin retraining, adding at least one feature value that is identified for a frame to a feature value sum that is associated with the state that is aligned with the frame and storing the sum as speech information; and

adding to a frame count associated with a state each time a feature value is added to the feature value sum associated with the state.

2. (Original) The method of claim 1 wherein the speech signal comprises a single utterance.

3. (Original) The method of claim 1 wherein the steps of identifying, decoding, aligning, and adding are repeated for each of a plurality of utterances.

4. (Original) The method of claim 3 wherein for each utterance the step of adding to a feature value sum comprises adding to a feature value sum generated from a previous utterance.

5. (Cancelled)

6. (Currently Amended) The method of claim 1~~5~~ further comprising retraining the speech model based on the feature value sums and the frame counts associated with the states.

7. (Original) The method of claim 6 wherein retraining the speech model comprises dividing each state's feature value sum by the state's frame count to form an average value for each state.

8. (Currently Amended) The method of claim 6 wherein retraining the speech model comprises starting a new computing thread on which ~~the~~ training operations are performed.

9. (Original) The method of claim 8 wherein retraining the speech model further comprises updating at least one speech model parameter without locking out the speech model so that the speech model is available for decoding during training.

10. (Original) The method of claim 6 further comprising after retraining the speech model repeating the steps of identifying, decoding, aligning, and adding for a new utterance.

11. (Original) The method of claim 10 wherein adding to a feature value sum for a state after retraining the speech model comprises adding to the feature value sum that was used to retrain the model.

12. (Currently Amended) The method of claim 1 wherein decoding the speech signal further comprises assigning frames to alignment units and wherein aligning comprises aligning ~~the~~ states that form the alignment unit with frames assigned to the alignment unit.

13. (Original) The method of claim 12 wherein the alignment unit is a word.

14. (Currently Amended) The method of claim 1~~5~~ wherein multiple feature value sums and multiple frame counts are associated with each state.

15. (Currently Amended) A speech recognition system for recognizing linguistic units in a speech signal, the system comprising:

an acoustic model;

a decoder that uses the acoustic model to identify alignment units in the speech signal and to recognize linguistic units in the speech signal;

an aligner that aligns states of the alignment units identified by the decoder with frames of the speech signal;

a dimension sum storage that stores feature dimension sums that are associated with states in the alignment units, at least one state's sums updated before a sufficient number of frames of the speech signal are available to train the acoustic model, each state's sums updated by summing dimension values from feature vectors assigned to frames aligned with the state; ~~and~~

a model adapter that uses the feature dimension sums to train the acoustic model after a sufficient number of frames of the speech signal are available; and

a trainer controller that causes the frames of the speech signal to be deleted after the feature dimension sums are formed but before the model adapter trains the acoustic model.

16. (Cancelled)

17. (Original) The speech recognition system of claim 15 further comprising an initial acoustic model, wherein the model adapter trains the acoustic model by adapting the parameters of the initial acoustic model to form a new version of the acoustic model.

18. (Original) The speech recognition system of claim 15 wherein the model adapter is a set of computer-executable instructions that are processed on a different thread from the decoder.

19. (Currently Amended) The speech recognition system of claim 15 wherein the decoder assigns frames of the speech signal to words and wherein the aligner aligns the frames assigned to a word with ~~the~~ states of the word.

20-31. (Cancelled)

32. (New) A method of storing speech information for use in retraining a speech model, the method comprising:

receiving a speech signal;

identifying at least one feature value for each frame of a set of frames of the speech signal;

decoding the speech signal based on the speech model to identify a sequence of alignment units;

aligning a state of an alignment unit from the sequence of alignment units with a frame in the set of frames of the speech signal;

before receiving enough frames of the speech signal to begin retraining, adding at least one feature value that is identified for a frame to a feature

value sum that is associated with the state that is aligned with the frame and storing the sum as speech information; and

wherein the steps of identifying, decoding, aligning, and adding are repeated for each of a plurality of utterances and for each utterance, the step of adding to a feature value sum comprises adding to a feature value sum generated from a previous utterance.